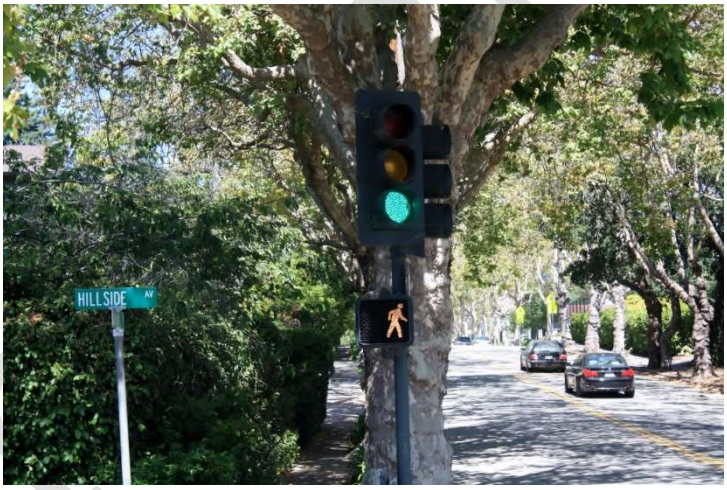


Piedmont Safer Streets

Planning Context

Administrative draft | November 2020

Introduction

The City of Piedmont is in the process of updating its original Pedestrian and Bicycle Master Plan (PBMP), adopted in 2014. The main objectives of the current planning process, called Piedmont Safer Streets, are to revisit and update the recommendations in the 2014 plan, and to incorporate new recommendations to address the community's concerns about broader traffic safety.

The first substantive task in the Piedmont Safer Streets process was to update our understanding of the local planning context surrounding walking, biking and, more generally, traffic in Piedmont. As part of that task, we analyzed traffic collisions over a recent 10-year period; reviewed relevant transportation-related plans and studies developed since the 2014 plan; and inventoried walking-, biking- and other transportation-related projects and other activities accomplished in Piedmont also since 2014. This report presents the key findings from that task.

In addition to updating our understanding of the local planning context, this report also will help us make better sense of the next task in the planning process: the community needs assessment. Relying on input from the public and key stakeholders, the needs assessment will examine changes since 2014 in the needs, concerns, priorities, expectations and suggestions of residents regarding walking, biking and traffic safety.

Report contents

Traffic collisions

This section contains an analysis of traffic collisions in Piedmont. The data for all but the last part of this section comes from the California Highway Patrol's Statewide Integrated Traffic Records System (SWITRS), a database of collisions reported by local police departments and other law enforcement agencies. The analysis covers the period from 2010 through 2019, the most recent ten-calendar-year period for which SWITRS data is available. This analysis considers only the more serious collisions—those resulting in injuries or fatalities. It does not include those collisions that resulted only in property damage.

Overview

For the 2010–2019 period, there were 86 traffic collisions reported in Piedmont that resulted in injuries to the people involved and zero that resulted in fatalities. Of the 86 collisions that resulted in injuries, 16 involved a motor vehicle and a pedestrian while 20 involved a motor vehicle and a cyclist (see table below). An additional 31 collisions involved two moving motor vehicles (including motorcycles) and 18 involved a moving motor vehicle and either a parked vehicle or a fixed or other object. Lastly, one collision involved a bicyclist and a pedestrian.

Vehicles/parties involved	Number
Motor vehicle–motor vehicle	31
Motor vehicle–bicyclist	20
Motor vehicle–pedestrian	16
Motor vehicle–fixed or other object	15
Motor vehicle–parked motor vehicle	3
Bicyclist–pedestrian	1
Total	86

A comparison between the first and second five-year periods (the first being 2010–2014, before the adoption of the 2014 Pedestrian and Bicycle Master Plan, and the second being 2015–2019) shows that collisions involving pedestrians more than doubled, from an average of 1 per year to 2, while collisions involving cyclists declined from an average of 2.4 per year to 1.6 (see table below).

	Collisions per year	
Period	Pedestrian	Bicyclist
2010–2014 (first five years)	1.0	2.4
2015–2019 (second five years)	2.2	1.6

Because some of the 86 collisions summarized above resulted in multiple injury victims, those collisions resulted in 100 people injured. The table below categorizes the injury victims by the severity of their injury, and includes separate columns for pedestrians and bicyclists injured.

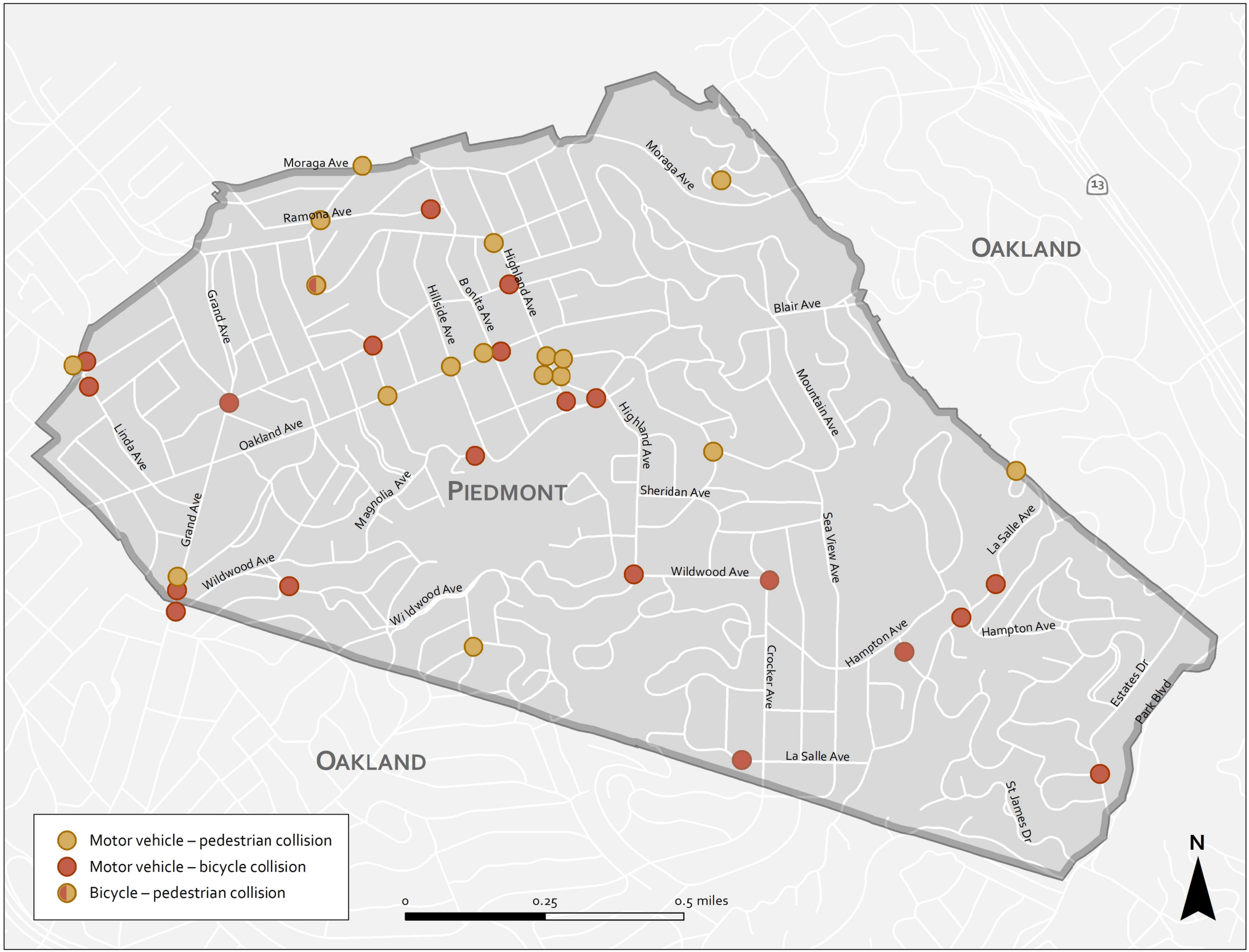
		Injury victims	
Injury severity	Total	Pedestrian	Bicyclist
Severe injury	2	1	0
Other visible injury	26	8	11
Complaint of pain	72	19	22
Total	100	28	33

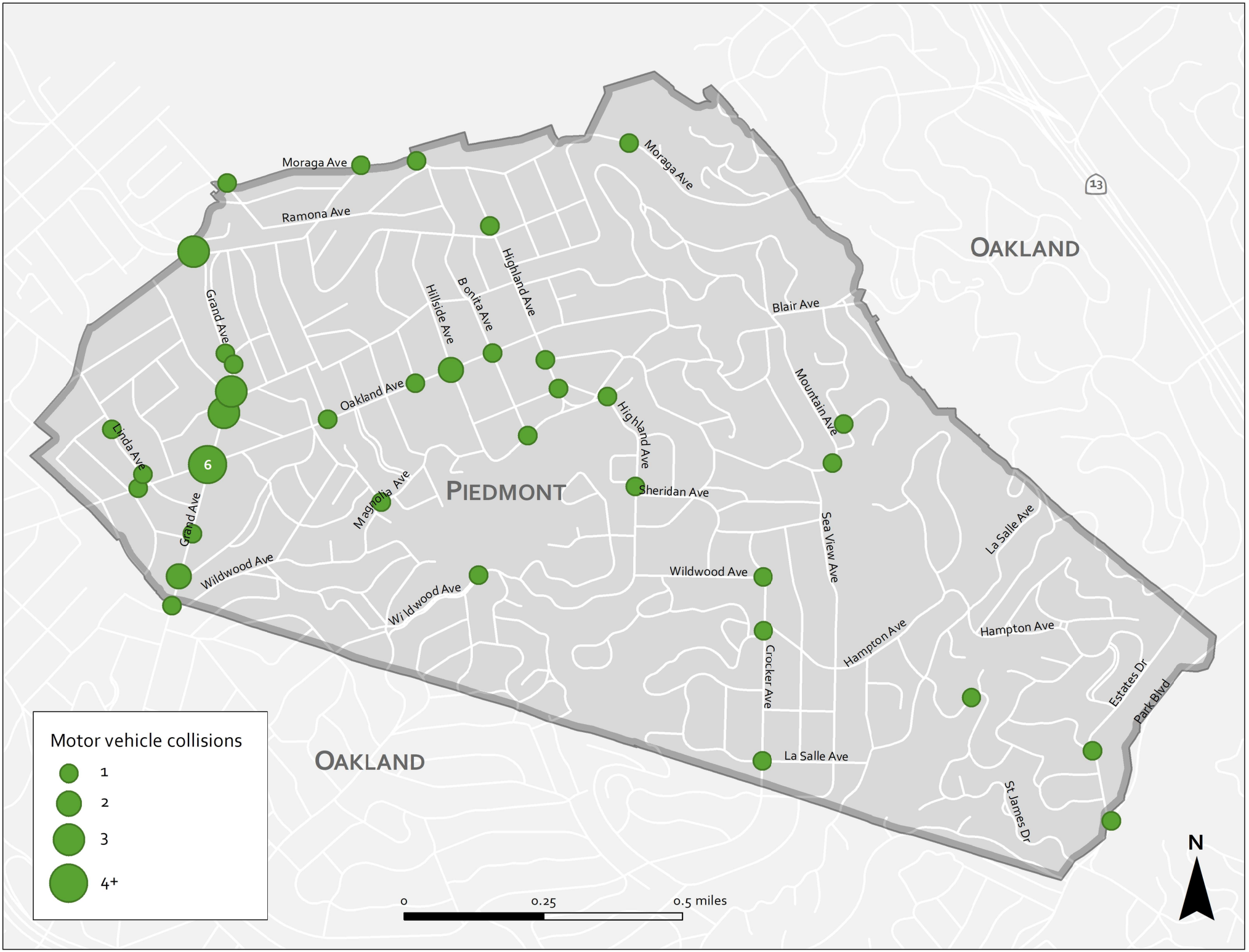
Among the 86 collisions summarized above, the main primary collision factors were improper turning (21 collisions) and speeding (12 collisions). Also, over a fifth of the collisions (19) involved a party that had been drinking alcohol.

Collision hotspots

The maps on the following pages show the locations of (i) the 37 collisions involving a pedestrian or bicyclist and (ii) the 49 collisions involving two moving motor vehicles or a moving motor vehicle and either a parked vehicle or another object. Below are some conclusions regarding the locations of these collision. It should be noted that while collision clusters indicate hotspots, or areas of concern, they do not necessarily correspond to traffic risk or hazard level. Some streets and intersections of the City might have more collisions simply because they have more traffic, not because they are inherently more dangerous.

- **Pedestrian collisions:** Approximately half the collisions involving pedestrians occurred on a short stretch of Oakland Avenue west of Highland Avenue, and on Highland Avenue between Craig and Vista Avenues. Only three of the 16 pedestrian collisions took place east of Highland Avenue, and only one took place south of Piedmont Park.
- **Bicycle collisions:** While the collisions involving cyclists were fairly dispersed, almost three quarters occurred in the quadrant of the City that is north and west of Piedmont Park. Also, almost all the collisions took place on or just off designated bikeways, including segments of Linda, Grand, Blair, Highland, Magnolia, Wildwood and La Salle Avenues.
- **Motor-vehicle collisions:** Probably not surprisingly, a disproportionate percentage of motor vehicle collisions occurred along Piedmont's main thoroughfares: Oakland, Highland and Moraga Avenues, and especially Grand Avenue, particularly at these intersections: Fairview Avenue, Oakland Avenue, Greenbank Avenue/Cambridge Way and Rose Avenue.


Moraga Ave
Ramona Ave
Moraga Ave
Highland Ave
Bonita Ave
Hillside Ave
Grand Ave
Blair Ave
Mountain Ave
Linda Ave
Oakland Ave
Highland Ave
Magnolia Ave
Sheridan Ave
Grand Ave
Wildwood Ave
Wildwood Ave
Wildwood Ave
Sea View Ave
La Salle Ave
Hampton Ave
Hampton Ave
Crocker Ave
Estates Dr
Park Blvd
La Salle Ave
St James Dr
PIEDMONT
OAKLAND
OAKLAND
13
Motor vehicle – pedestrian collision
Motor vehicle – bicycle collision
Bicycle – pedestrian collision
0
0.25
0.5 miles
N


Moraga Ave
Moraga Ave
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Grand Ave
Magnolia Ave
Sheridan Ave
Sea View Ave
La Salle Ave
Wildwood Ave
Wildwood Ave
Wildwood Ave
Crocker Ave
Hampton Ave
Hampton Ave
Estates Dr
Park Blvd
La Salle Ave
St James Dr
PIEDMONT
OAKLAND
OAKLAND
13
Motor vehicle collisions
1
2
3
4+
0
0.25
0.5 miles
N

OTS rankings

Every year, the California Office of Traffic Safety (OTS) ranks the state's cities against other cities with similar-sized populations on various traffic safety statistics. The rankings are based on data from several sources, including SWITRS, and give varying weights to such factors as population, daily vehicle-miles traveled, crash records and crash trends.

In 2017—the latest year for which OTS had published rankings as of this writing—Piedmont generally ranked as safer in terms of traffic hazards than over two thirds of its peer cities. An OTS ranking of 1 is considered the 'worst' in terms of traffic safety, so for the 101 cities in Piedmont's population group, a ranking of 1 is the worst, 51 is average and 101 is the best. Piedmont's composite, or overall, ranking, was 69th out of 101 cities (see table below)—in other words, better than 68% of other cities in its group.

Piedmont ranked 76th (better than 75% of peer cities) in terms of pedestrian traffic safety and 61st in terms of bicycle traffic safety (better than 60% of peer cities). Also, Piedmont ranked 91st in terms of fatalities and injuries; 77th for speed-related collisions; and 91st for nighttime collisions. OTS notes that its "rankings are only indicators of potential problems" and that "there are many factors that may either understate or overstate a city/county ranking that must be evaluated based on local circumstances." For more detailed information about the rankings, visit ots.ca.gov/media-and-research/crash-rankings/ .

Type of collision	Ranking*
Composite	69
Pedestrians	76
Bicyclists	61
Total fatal and injury	91
Speed related	77
Nighttime	91

** Out of 101 cities, where 1 is 'worst' and 101 is 'best.'*

Related plans and studies

This section summarizes traffic- and transportation-related plans and studies relevant to the Piedmont Safer Streets project that have been developed since the 2014 Pedestrian and Bicycle Master Plan. The documents were reviewed with an eye toward specific and "actionable" proposed projects, practices, policies and other recommendations that might be appropriate for eventual inclusion in the Piedmont Safer Streets Plan. The section is divided into two sub-sections: (i) City of Piedmont plans and studies (items 1–13 below); and (ii) plans by other agencies (items 14 and 15).

City of Piedmont plans and studies

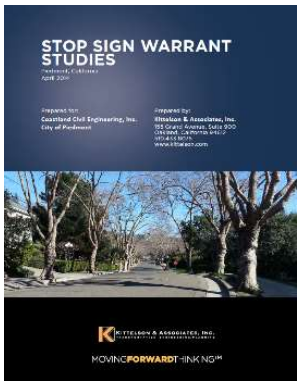
❶ Wildwood Avenue Traffic Study (2012)

The Wildwood Avenue study evaluated traffic operations between Nova Drive and Grand Avenue with the objective of identifying traffic-calming measures while continuing to serve local circulation and access needs. The study found that multi-way stop control is not warranted but that the street's topography, geometry and residential character call for possible street modifications to control speeds. Pages 6–8 outline ideas for reconfiguring the Nova Drive/Magnolia Avenue and Wildwood Avenue/Nova Drive West intersections and possible traffic-calming measures along Wildwood Avenue.

❷ Speed Zone Engineering and Traffic Survey (2014)

This study surveyed car speeds on 14 street segments throughout Piedmont (see map on page 2) during off-peak hours and analyzed existing speed limits. The study recommended one speed-limit change: increasing it from 25 mph to 30 mph on Oakland Avenue. In that case, the study also suggested a speed-feedback sign (to inform drivers when they are speeding) or increased speed enforcement.

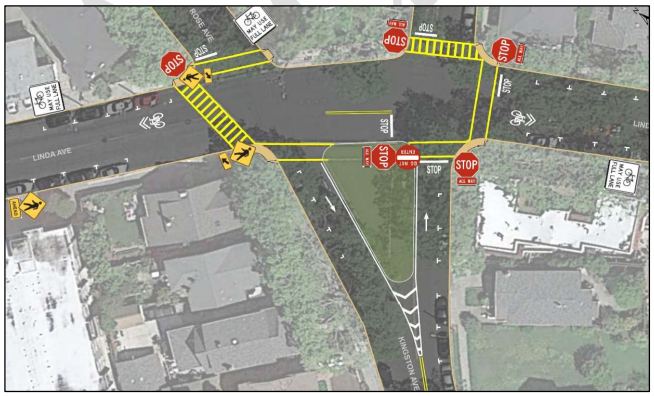
❸ Stop Sign Warrant Studies (2014)



This report provided traffic analyses and findings for proposed multi-way stop controls at three intersections: Crocker Avenue/ Ashmount Avenue, Crocker Avenue/La Salle Avenue and Hampton Road/Sea View Avenue. The report found that stop control is not justified at any of the intersections and instead recommended alternatives to control speeds and improve traffic on the minor streets. The recommendations are listed on pages 13–14 and include improving the sight distance of drivers stopped at the intersections, and introducing physical traffic-calming measures.

❹ Kingston Avenue–Linda Avenue–Rose Avenue Triangle Traffic Study (2015)

This study considered two design concepts for this intersection, shown on pages 2–3, consisting of changes to pavement markings and traffic controls. Concept 1 involves a landscaped median occupying the currently empty median space on Kingston Avenue south of Linda Avenue. Concept 2 involves enlarging the landscaped median by converting the two-way portion of Kingston Avenue south of Linda Avenue and east of the triangle into a northbound-only segment.



Concept 2 of the Kingston Avenue–Linda Avenue–Rose Avenue Triangle Traffic Study.

❺ Moraga Avenue S-Curve Improvements (2015)

This study reviewed existing conditions at the Moraga Avenue 'S-Curve' around Ramona Avenue, and proposed several infrastructure improvements. Page 2 contains a conceptual drawing of the intersection with callouts outlining the various proposed improvements.

❻ Grand Avenue & Oakland Avenue Pedestrian Safety Analysis (2016)

Based on an analysis of existing conditions, this study evaluated three signal-timing concepts at the intersection of Grand and Oakland Avenues in order to improve safety, especially for pedestrians. The study recommended a shorter-term "signal optimization" alternative that would increase crossing times for pedestrians and possibly a more expensive, longer-term "signal phasing" alternative that would allow for left-turn phasing.

❼ Residential Permit Parking Survey on Kingston Avenue and Vicinity (2016) and Addendum (2017)

In response to a neighborhood request, the City evaluated the possibility of a permit-only parking system on portions of Rose, Kingston, Lake and Linda Avenues. The 2016 study concluded that a residential permit parking program would improve access to on-street parking by area residents and is justified by the data. The study recommended that the City work with the residents to design the rules for the parking program. The 2017 addendum examined several additional considerations and proposed four 'bundles' of program rules for presentation to the residents.

❽ Piedmont Climate Action Plan 2.0 (2018)

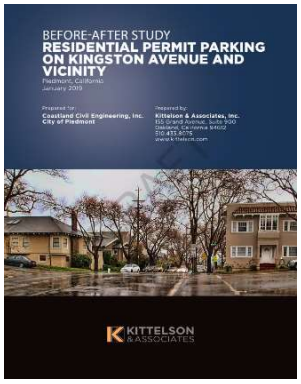
This is the update to the City's original Climate Action Plan (CAP), adopted in 2010. Implementation tables in the updated plan list relevant transportation-related objectives and specific measures and actions on pages 90–92 and 101. Objectives include increasing the number of trips made by biking and walking; reducing transportation emissions from schools; and reducing municipal transportation emissions.

❾ Intersection Analysis (2018)

This study assessed traffic-safety concerns at five intersections and provided location-specific recommendations. The intersections (and the pages on which the recommendations are listed) are:

- Moraga Avenue / Mesa Avenue (page 5).
- Crest Road / Hampton Road (page 7).
- Harvard Road / Portsmouth Road (page 9).
- Lincoln Avenue / Sheridan Avenue (pages 11–12).
- Somerset Road / Crest Road (page 13).

❿ Before–After Study: Residential Permit Parking on Kingston Avenue and Vicinity (2019)



This before–after study found that the residential permit parking program in the Kingston Avenue neighborhood (see item 7 above) increased the availability of on-street parking in the study area across all periods of data collection. The study suggested that additional feedback be collected from neighborhood residents. Because Greenbank Avenue, outside the study area, saw a notable increase in both daytime and nighttime parking, the study also suggested that parking activity on that street continue to be monitored.

⓫ Path Inventory (2019)

In 2019 the City inventoried all public paths in Piedmont (in other words, walkways other than sidewalks) to assess conditions and identify any needed repairs. Path conditions were evaluated on safety concerns, structural integrity and aesthetics, and each path was given an overall condition rating of very good, good, fair, poor or very poor. Also, each repair project was given a priority ranking of 1, 2 or 3, indicating high, medium and low priority, respectively. The total estimated cost for the recommended repairs was $220,000. The inventory report also noted additional potential work to address root damage, slope instability, drainage issues and other path maintenance challenges.

⓬ Scenic Avenue Engineering and Traffic Survey (2020)

This study analyzed traffic speeds on Scenic Avenue north of Blair Avenue, a narrow residential street with on-street parking that is nevertheless used for two-way traffic. Most of Scenic has no sidewalks, which forces pedestrians to walk in the street. For various reasons, the study recommended that the speed limit remain at 15 mph.

⓭ Wildwood Gardens One-Way Loop Conversion (2020)

The City evaluated a neighborhood request to convert the western loop of Wildwood Gardens to one-way traffic. This study, which also analyzed the eastern loop, recommended keeping the loops two-way. The study also recommended restricting on-street parking in narrow portions of the eastern loop, especially where the roadway curves, to provide better access for emergency and other larger vehicles.

Plans by other agencies

⓮ Let's Bike Oakland (2019)

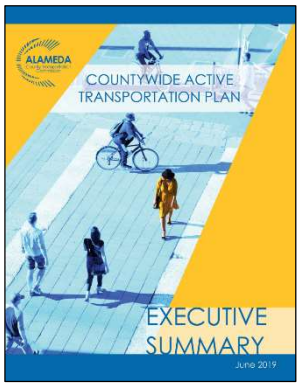
Maps in the Let's Bike Oakland plan show existing bikeways that connect into or lead very close to Piedmont on the following Oakland streets: Linda Avenue, Oakland Avenue, Grand Avenue and Lakeshore Avenue (see the map on page 84). These bikeways consist of bike lanes.

In addition, the plan recommends new or upgraded bikeways on the following streets connecting to or running very near Piedmont (see the maps on pages 92 and 94; descriptions of the bikeway types are on page 22):

- Ramona Avenue: neighborhood bike route.
- Moraga Avenue: bike lanes.

- Pleasant Valley Avenue (connecting to Ronada Avenue and Grand Avenue in Piedmont): buffered bike lanes.
- Brandon Street (connecting to Rose Avenue): neighborhood bike route.
- Oakland Avenue: buffered bike lanes.
- Grand Avenue: protected bike lanes.
- Lakeshore Avenue (ending near Winsor Avenue): buffered bike lanes.
- Sunnyhills Road (connecting to Indian Road): neighborhood bike route.
- Park Boulevard: bike lanes south of St. James Drive and a bike path north of it.
- Leimert Boulevard (connecting to St. James Drive): neighborhood bike route.

⓯ Alameda Countywide Active Transportation Plan (2019)



For Piedmont, the plan's "Community Profiles" chapter states that "low-stress connectivity…is generally decent for bicyclists" and that challenges to bicycling within the City "would likely be more related to topography." The profile goes on to mention that Piedmont's main barriers to pedestrian and bicycle connectivity are Piedmont Park and, more generally, the disconnected street network in some areas.

The maps on pages 56 and 57 of the chapter show Piedmont's bicycle and pedestrian high-injury networks (HINs). These are the worst-performing local street segments in terms of frequency and severity of traffic collisions. The streets of highest concern for bicycling are Linda, Grand, Highland, Wildwood and La Salle Avenues. For walking, Highland Avenue (for its entire length) is the street of highest concern; other streets of concern are Grand, Oakland, Estrella, Moraga, Bonita, Vista, Craig, Mountain and Dudley Avenues and Abbot Way.

Construction projects

This section summarizes transportation-related construction, or capital, projects that the City of Piedmont has completed since 2014.

- "Road diet" on Grand Avenue between the City border to the south and Greenbank Avenue/Cambridge Way. The road diet entailed removing one travel lane in each direction and using the freed-up space to install bike lanes and a center turn lane.

Grand Avenue after the road diet.

- Landscaped triangle at the intersection of Kingston, Linda and Rose Avenues.

Kingston–Linda–Rose triangle.

- Bulbouts (sidewalk extensions) at Linda Avenue/Kingston Avenue and bulbouts, flashing beacons and new street lighting at the mid-block crosswalks on Linda Avenue around Beach School.

Linda Avenue at Linda Playground.

- Safety railings along both sidewalks of the Oakland Avenue bridge. The main impetus for the project was to prevent schoolchildren from accidentally falling into the travel lanes.

Sidewalk railings on the Oakland Avenue bridge.

- Painted island and crosswalks on Nova Drive at Magnolia Avenue.

The Nova Drive/Magnolia Avenue intersection.

- Steel bollards along the perimeter of the sidewalk fronting the Corpus Christi School campus, at the intersection of Estates Drive and Park Boulevard. The project was in response to several incidents of runaway cars at the intersection.

Bollards in front of Corpus Christi School.

- Intersection narrowing and crosswalk improvements at Grand Avenue/Fairview Avenue using paint, striping and plastic posts.

Improvements at Grand Avenue/Fairview Avenue.

- *[Includes pending projects]* Bikeways on the following street segments:
  - **Cambridge Way:** Bike route between Grand and Ricardo Avenues.
  - **Grand Avenue:** Bike lanes between Rose Avenue and Greenbank Avenue/Cambridge Way. Also, bike lanes as part of the road diet mentioned earlier, between Greenbank Avenue/Cambridge Way and the City border to the south.
  - **Highland Avenue:** Bike route between Magnolia and Sierra Avenues.

  - **Linda Avenue:** Bike lane westbound and bike route with sharrows eastbound between Rose and Grand Avenues.
  - **Magnolia Avenue:** Bike route between Hillside Avenue and Nova Drive, including with sharrows in the downhill direction.
  - **Moraga Avenue:** Bike lanes between Ramona and Estrella Avenues; bike route between Estrella and Mesa Avenues; and bike route between Mesa Avenue and the City border to the east, including with sharrows in the downhill direction.
  - **Sheridan Avenue:** Bike lanes between Highland and Caperton Avenues.
  - **Vista Avenue:** Bike route with sharrows between Hillside and Highland Avenues.

- *[Includes pending projects]* **Miscellaneous crossing improvements** at intersections including:
  - Highland Avenue/Craig Avenue (bulbouts and enhanced crosswalks).
  - Wildwood Avenue/Palm Avenue (new crosswalk).
  - Oakland Avenue at Jerome and at El Cerrito Avenues (flashing beacons and other improvements).

- **All-way stop signs:**
  - Magnolia Avenue at Hillside, El Cerrito and Park View Avenues.
  - Wildwood Avenue at Nova Drive, Prospect Road and Highland Avenue.
  - Hampton Road at Crocker Avenue and at Sea View Avenue.
  - St. James Drive/Hampton Road.

- *[Includes pending projects]* **New or improved pedestrian curb ramps** at intersections including:
  - Arbor Drive at Fairview Avenue and at Nova Drive.
  - Hampton Road at Hampton Court and at Glen Alpine Road.
  - Harvard Road/Portsmouth Road.
  - Highland Avenue at Park Way, Craig Avenue, Mountain Avenue, Piedmont Court, Sierra Avenue and Caperton Avenue.
  - Magnolia Avenue at El Cerrito Avenue, Jerome Avenue, Larmer Court and Park View Avenue.
  - Nova Drive at Magnolia Avenue and at Wildwood Avenue.
  - Oakland Avenue at Howard, Sunnyside and Olive Avenues.
  - Sheridan Avenue/Caperton Avenue
  - Wildwood Avenue at Piedmont Park.

- **Street resurfacing projects,** including on Abbott Way, Annerley Road, Arbor Drive, Caperton Avenue, Craig Avenue, Crocker Avenue, Echo Lane, Harvard Road, Highland Way, Magnolia Avenue, Moraga Avenue, Nellie Avenue, Oakland Avenue, Requa Place and Wildwood Avenue.

Non-construction activities

The previous section listed transportation-related construction projects that the City of Piedmont has completed since 2014. During that time, a number of non-construction activities, programs and initiatives related to walking, biking and traffic have also taken place in Piedmont. These are summarized below.

Safe Routes to School

Perhaps the most common walking- and biking-related events and activities are those designed to encourage and make it safer for children to walk and bike to school. In Piedmont—and throughout Alameda County—most such efforts are led by the Alameda County Transportation Commission, through its Safe Routes to School (SR2S) Program.

In past years, SR2S activities have been conducted at the three elementary schools in Piedmont—Beach, Havens and Wildwood—and at Piedmont Middle School. Below is an inventory of these activities at the four schools since the 2014–15 school year. Interest in the program on the part of the schools declined more recently, so that no activities were conducted at any of the schools in the 2018–19 and 2019–20 school years.

2014–15 school year

- Havens, Beach and Wildwood, and Piedmont Middle: International Walk and Roll to School Day (global encouragement event held in October).
- Havens and Beach: Walk and Roll to School Day (similar to the previous event but local, and held in May).
- Piedmont Middle: Golden Sneaker Contest (competition among classrooms for the most students and administrators using active or shared transportation options to get to school).
- All elementary schools: Bike Festival, held at Beach (in partnership with the Piedmont Police Explorers and the Boy Scouts) and featuring a variety of educational, safety-oriented and encouragement activities.

2015–2016 school year

- Havens, Beach and Wildwood, and Piedmont Middle: International Walk and Roll to School Day.
- All elementary schools: Bike Festival at Beach.

2016–2017 school year

- Piedmont Middle: International Walk and Roll to School Day.
- All elementary schools: Bike Festival at Beach.

2017–2018 school year

- Piedmont Middle: International Walk and Roll to School Day.

Pedestrian and Bicycle Advisory Committee

In 2020 the Piedmont City Council created a nine-member Pedestrian and Bicycle Advisory Committee (PBAC), consisting of appointed volunteers. The committee, which serves in an advisory capacity to City staff and the Council, will guide the development of the Piedmont Safer Streets Plan and, eventually, also its implementation. The committee met for the first time in October 2020.

Crosswalk policy

The City receives numerous requests from the public for the installation of crosswalk markings and 'Stop' and 'Yield' signs. While these requests are reviewed by City staff using industry standards, in 2017 the City Council adopted written policies for the installation of those traffic devices. The objectives of the policy are to better ensure consistency and objectivity in the review of residents' requests; provide transparency on the process to the public; and allow for flexibility to industry standards in addressing unique conditions on local streets. Adoption of such a policy was a recommendation in the 2014 Pedestrian and Bicycle Master Plan.

Bike to Work Day

Perhaps the best-known bicycle-promotion initiative is Bike to Work Day, held annually in the Bay Area in May. That day, during the morning and/or evening commutes, volunteers at a network of 'energizer stations' give away refreshments, incentive items, bike commuting information and, of course, encouragement to bicyclists.

Piedmont riders at the energizer station at Ace Hardware in 2019. (Credit: Piedmont Post.)

For many years now, Piedmont Connect (a grassroots group with a focus on environmental sustainability) and Bike East Bay (a bicycle advocacy organization) have co-sponsored and staffed an energizer station in the Ace Hardware parking lot. In 2019, for the first time, Piedmont featured a second energizer station, this one staffed by City employees and officials, and located at the entrance to the Piedmont Community Hall parking lot. Among other co-sponsors, the City's Police Department provided safety lights, while Mulberry's Market gave away fruit and cookies.